

Work Order ID 95549

January 11, 2013 9:42:15 AM

95549

**PRELIMINARY
ISSUE**

Page 1

Item ID: D4688-1-180

Accept

N900040100

Setup Start *NS1*

Revision ID: ~~PRELIM~~

Stop *NS2*

Item Name: Extrusion 180" Long

Start Date: 1/11/13 Start Qty: 70.00 *70*

Cust Item ID:

Required Date: 1/25/13 Req'd Qty: 70.00 *70*

Customer:

Reference:

Approvals: Process Plan: CL Date: 13/01/11

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start *NR1*

Stop *NP2*

| Work Center | Description | Run Hours | Accept Qty | Reject Qty | Reject Number | Stamp |
|-------------|-------------|-----------|------------|------------|---------------|-------|
|-------------|-------------|-----------|------------|------------|---------------|-------|

Draw Nbr

Revision Nbr

D4688

A

100

PURCHASING

0.00

100

Purchasing

Memo

0.00

Purchasing

Issue P/O: 18809

Manufacture extrusion as per Dwg D4688

Order at 180" long

Supplier: Signature Aluminum Die # DAA-9

Pull test to ASTM standard B221 required.

Material certification is required

CL 13/01/11 70

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.00

Packaging

Ensure material certification is attached

13/3/14

28

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | | | | | | | | |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Operator | | | | | | | | | |
| Material | | | | | | | | | |
| Setup | | | | | | | | | |
| Other | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| Landing Gear | General | Other |
|---|---|--|
| <input type="checkbox"/> Bending | <input type="checkbox"/> Bend | <input type="checkbox"/> Grain |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route | <input type="checkbox"/> Hardware |
| <input type="checkbox"/> Cracks | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete |
| <input type="checkbox"/> Crushed/Crimped. | <input type="checkbox"/> Burrs | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs | <input type="checkbox"/> Contamination | <input type="checkbox"/> Maintenance |
| <input type="checkbox"/> Heat Treat | <input type="checkbox"/> Countersink | <input type="checkbox"/> Mislabeled |
| <input type="checkbox"/> Inspection Strip in Tube | <input type="checkbox"/> Cut Too Short | <input type="checkbox"/> Misread |
| <input type="checkbox"/> Ripples in Bend | <input type="checkbox"/> Drill Holes | <input type="checkbox"/> Offset |
| <input type="checkbox"/> Torque Waves in Extrusion | <input type="checkbox"/> Drawing | <input type="checkbox"/> Out of Calibration |
| <input type="checkbox"/> Turning Sequence | <input type="checkbox"/> Finish | <input type="checkbox"/> Out of Sequence |
| <input type="checkbox"/> Wave/Twist in Tube | <input type="checkbox"/> Folio | <input type="checkbox"/> Outside Dimensions |
| | | <input type="checkbox"/> Ovalized |
| | | <input type="checkbox"/> Over/Under tolerance |
| | | <input type="checkbox"/> Part Incorrect |
| | | <input type="checkbox"/> Part Lost/Missing |
| | | <input type="checkbox"/> Part Moved |
| | | <input type="checkbox"/> Positioned Wrong |
| | | <input type="checkbox"/> Power Loss/Surge |
| | | <input type="checkbox"/> Pressure/Forced |
| | | <input type="checkbox"/> Temperature/Cure |
| | | <input type="checkbox"/> Weld |
| | | <input type="checkbox"/> Wrong Stock Pulled |
| | | <input type="checkbox"/> Other |

Work Order ID 95549

95549

Page 2

January 11, 2013 9:42:15 AM

Item ID: D4688-1-180 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: PRELIM Stop ***NS2***
 Item Name: Extrusion 180" Long
 Start Date: 1/11/13 Start Qty: 70.00 ***70*** Cust Item ID:
 Required Date: 1/25/13 Req'd Qty: 70.00 ***70*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|--|----------------------|---------|------------------------------|--------------|---------------|---------------|------------------|---------------------------------------|
| 120 *120* QC Quality Control | QC6- Inspect dimensions to drawing Memo Check Pull test per Dwg D4688 for compliance page attached. Check hardness with Webster tester | 0.00 0.00 | | DAS 16 9-89 13/2/14 | | | | | |
| 130 *130* Packaging Packaging | Identify as per dwg & Stock Location: 46 Memo | 0.00 0.00 | | | | | | | ND 132-27 |
| 140 *140* QC Quality Control | QC21- Final Inspection - Work Order Release Memo | 0.00 0.00 | | | | | | | 13/3/25 ML5 13-02-28 |

Picklist Print

Page 1

January 11, 2013 9:42:14 AM

Work Order ID: 95549

Parent Item: D4688-1-180

Start Date: 1/11/13

Required Date: 1/25/13

Parent Item Name: Extrusion 180" Long

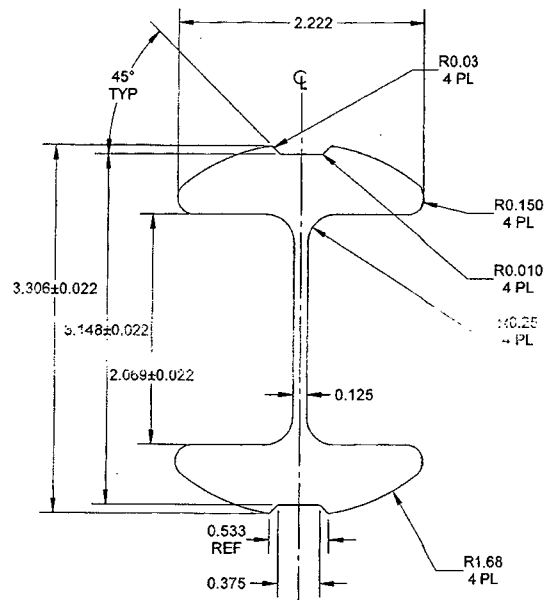
Start Qty: 70.00

Required Qty: 70.00

Comments: IPP REV:A 13.01.09 NEW ISSUE DD VERF:JLM

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|-------------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D4688-1-180P Extrusion 180" Long | | Purchased | No | | | | Each | 0.0000 | | 70 | | | |

1/13/14 (28)



D4688-1 EXTRUSION

C213/01111
W/0:95549

GENERAL NOTES:

- 1) MATERIAL: 6061-T6 PER QQ-A-200/8 OR ASTM B221
MINIMUM TENSILE YIELD STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
MINIMUM ELONGATION = 8%

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO
ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY
TO ENSURE THAT THE BATCH MEETS THE ABOVE
MINIMUM MECHANICAL PROPERTIES

- 2) FINISH: N/A
- 3) TOLERANCES: PER QQ-A-200/8 UNLESS OTHERWISE NOTED. LENGTH
XXX IS ±0.07-0.0.
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP CORNERS 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4688-1" AND BATCH NUMBER
"BNXXXX" PER QSI 044 6.1
- 7) WEIGHT: 2.921 lb/ft
- 8) NO TOOLING MARKS
- 9) PART NUMBER IS D4688-1-XXX WHERE XXX IS THE
CUT LENGTH IN INCHES (EX. D4688-1-180 IS 180" LONG)
- 10) D4688-1 EXTRUSION MANUFACTURED FROM: SIGNATURE ALUMINUM
DIE # DAA-9

| | | | |
|------------|-------------|---|--------------|
| A NEWISSUE | | AP | 12.12.17 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | AP | DART AEROSPACE USA, INC. KENT, WA | |
| DRAWN | AP | | |
| CHECKED | AP | DRAWING NO. | REV. A |
| MFG. APPR. | AP | EXTRUSION | SHEET 1 OF 1 |
| APPROVED | AP | TITLE | SCALE |
| DE APPR. | AP | D4688 | NTS |
| DATE | 12.12.17 | COPYRIGHT © 2012 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS UNCLASSIFIED AND IS SUPPLIED ON THE EXPRESS OR IMPLIED WARRANTY THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON OR ENTITY WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC. | |



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO18809**

Purchase Order Date 1/11/13

PO Print Date 1/16/13

Page Number 1 of 1

Order From :

VC-BON001

SIGNATURE ALUMINUM
1850 CLEMENTS ROAD
PICKERING, ON L1W 3R8
CA

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

800 563 1079

800 565 8339

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

Ship To :

DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

REVISED

| Line Nbr | Reference Revision ID Vendor Part Number | Description/ Mfg ID | Req Date/ Taxable | Req Qty/ Unit of Measure | Ship Method | Unit Price | Extended Price |
|----------|--|---|----------------------|-----------------------------|-------------|--------------|-------------------|
| 1 | D4688-1-180P | Extrusion 180" Long | 1/31/13 Yes | 25.00 Each | Yours ppd | \$122.5014 | \$3,062.54 |
| | | Special Inst: AS PER DWG D4688 REV. A B95549 MATERIAL: 6061-T6 AS PER QQ-A-200/8 OR ASTM B221 MINIMUM TENSILE YIELD STRENGTH = 35 KSI MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI MINIMUM ELONGATION = 8% SIZE LENGHT 180" LONG SIGNATURE ALUMINUM DIE # DDA-9 PULL TEST TO ASTM B221 REQUIRED | | | | | |
| 2 | | TOOLING DDA-9 | 1/31/13 Yes | 1.00 Each | Yours ppd | \$1,280.0000 | \$1,280.00 |

MATERIAL CERTIFICATION
REQ'D UPON DELIVERY

PO Total: \$4,342.54

Change Nbr:

2

Change Date: 1/16/13

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required - YES NO



ACCT# 46024

INVOICING AND COMPANY LOCATION

SIGNATURE ALUMINUM CANADA
1850 CLEMENTS ROAD
PICKERING ON L1W 3R8

SHIPPING MANIFEST

MANIFEST DATE / DATE DU BODEREAU
02-12-13MANIFEST NUMBER / N° DE BODEREAU
009232SALES ORDER NUMBER / N° DE COM
108639

SHIP TO / EXPÉDIÉ À

DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
CANADA

PHONE: 613-632-5200

SOLD TO / VENDUE À

DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
CANADA

PHONE: 613-632-5200

TERMS / FREIGHT

PP

REFER TO
THESE NUMBERS ON
ALL CORRESPONDANCEREFEREZ-VOUS A CES
NUMEROUS POUR TOUTE
CORRESPONDANCE

| | | | | | | | | | | | | | | | |
|-------------------------------------|---|------------------------------------|---|--|--|--|---------------------------|-------------------------|-------------------------------|---|-----------------------------------|---|----|--|--|
| CUSTOMER ID / ID DU CLIENT 46024 | | ORDER DATE / DE LA COM 01/11/13 | | CUSTOMER PO NUMBER / CLIENT PO Nombre 18809 | | BILL OF LADING NUMBER / NO. DE CONNAISSEMENT 009232 | | JOB / FICHIER | | FIELD SALES REP / REP REGIONAL DES VENTES G.ATTENBOROU | | SALES REP / REP. DES VENTES G.ATTENBOROU | | CUST SERVICE REP / REP. SERVICE CLIENTELE DLB | |
| ITEM NO / NUMÉRO | ORIGINAL ORDER QUANTITY / Quantité d'ordre ORIGINAL | UNIT / UNITÉ | PREVIOUS SHIPPED QUANTITY / PRÉCÉDENT Quantité livrée | MFG. PART NUMBER / MFG. PARTIE NUMÉRO | ALLOY & TEMPER / ALLIAGE & TEMPER | FINISH DESCRIPTION / DESCRIPTION DE FINITION | NBR OF PKGS / NBR DE PKGS | GROSS LBS / LIVRES BRUT | NET QUANTITY / QUANTITÉ NETTE | UNIT / UNITÉ | QUANTITY DUE / Quantité en raison | | | | |
| 001 | 1,095 LB | | | DAA-9-1 | 6061 T6 | | 1 | 1,219 | 1,202 | LB | | | | | |
| | 497 KG | | | | 180.0000 IN | | | 553 | 545 | KG | | | | | |
| | 25 PC | | | | Cut(+): 0.1180 Cut(-): 0.0000 Min: -10 % Max: 10 % | | | | 28 | PC | | | | | |
| | | | | | | | 819691 / 167075 | 1 | 1,219 | 1,202 | | 28 | PC | | |

Transportation, traffic damages and/or shortage claims are to be noted on the delivery copy of sellers shipping manifests and signed and dated below by customers authorized representatives.
No return materials will be accepted for credit without permission. The articles and/or services covered by this shipping manifest were produced in accordance with the fair labor standards act of 1938 as amended. Order accepted subject to the terms and conditions stated on the reverse side.

CUSTOMER ACKNOWLEDGEMENT OF GOODS DELIVERED AND CONDITION

Page 1

DATE OF DELIVERY

DRIVER

| | | | |
|--------|-------|-------|----|
| 1 | 1,219 | 1,202 | LB |
| | 553 | 545 | KG |
| | | 28 | PC |
| TOTALS | | | |

**SIGNATURE ALUMINUM CANADA**1850 CLEMENTS RD
PICKERING, ON L1W 3R8**CERTIFICATE OF COMPLIANCE**

| Order Date | Order No. | Sale Order | Page |
|------------|-----------|------------|----------|
| 02/07/2013 | 5298084 | 108639 | 1 |
| CO # | PLANT | Lot # | Date |
| 18809 | 009232 | 819691 | 02/12/13 |

| | | | |
|---|--------------|---|-------|
| 46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA | | 46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA | |
| Item No. | Part No. | Item Description | QTY |
| 001 | DAA-9-1 | 180" MILL 6061 T6 | |
| Gross Weight | 1,219 LBS | | |
| Net Wt. | 1,202 LBS | 28 PCS | 1 PKG |
| Specification | ASTM B221-08 | | |

Mechanical Tests:

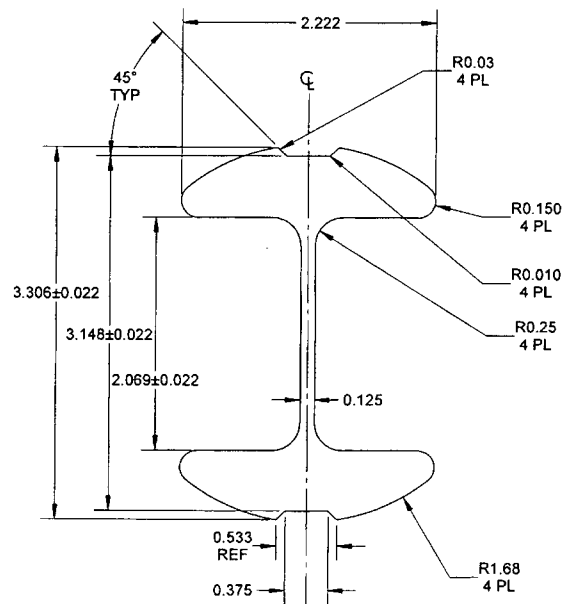
| Tensile | Yield | % Elongation | Conductivity | HRE |
|--------------|--------------|--------------|--------------|-----|
| MPA / KSI | MPA / KSI | | | |
| 305.6 / 44.3 | 286.9 / 41.6 | 10.2 | N/A | 93 |

Chemical Analysis:

| SI | FE | CU | MN | MG | CR | ZN | TI | V |
|------|------|------|------|------|------|------|------|------|
| 0.66 | 0.25 | 0.21 | 0.05 | 0.89 | 0.04 | 0.03 | 0.02 | 0.01 |

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgement form. No other warranties are applicable.

S. Mazzotta, Director of Quality Signature Aluminum Canada Inc



D4688-1 EXTRUSION

GENERAL NOTES:

1) MATERIAL: 6061-T6 PER QQ-A-200/8 OR ASTM B221
 MINIMUM TENSILE YIELD STRENGTH = 35 KSI
 MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
 MINIMUM ELONGATION = 8%

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO
 ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY
 TO ENSURE THAT THE BATCH MEETS THE ABOVE
 MINIMUM MECHANICAL PROPERTIES

2) FINISH: N/A

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED. LENGTH
 XXX IS +1.0 / -0.0.

4) ALL DIMENSIONS ARE IN INCHES

5) BREAK ALL SHARP CORNERS 0.010 MAX

6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4688-1" AND BATCH NUMBER
 "BNXXXX" PER QSI 044 6.1

7) WEIGHT: 2.921 lb/ft

8) NO TOOLING MARKS

9) PART NUMBER IS D4688-1-XXX WHERE XXX IS THE
 CUT LENGTH IN INCHES (EX. D4688-1-180 IS 180" LONG)

10) D4688-1 EXTRUSION MANUFACTURED FROM: SIGNATURE ALUMINUM
 DIE # DAA-9

RELEASED
 2013-03-25
 MP

| A | | NEW ISSUE | | AP | 12.12.17 |
|------------|----------|---|--------------|----|----------|
| REV. | | DESCRIPTION | | BY | DATE |
| DESIGN | AP | DART AEROSPACE USA, INC. KENT, WA | | | |
| DRAWN | AP | | | | |
| CHECKED | AP | DRAWING NO. | REV. A | | |
| MFG. APPR. | AP | EXTRUSION | SHEET 1 OF 1 | | |
| APPROVED | AP | TITLE | SCALE | | |
| DE APPR. | AP | D4688 | NTS | | |
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